ABSTRACT OF THE DISCLOSURE

A switch for an optical transmission network using wavelength division multiplexing has p1 input ports receiving p1 wavelengths and first switching means for switching the p1 wavelengths to p2 output ports, q1 input ports receiving q1 bands of wavelengths and second switching means for switching the q1 bands to q2 output ports, r1 input ports receiving r1 groups of bands and third switching means for switching the r1 groups of bands to r2 output ports. The three switching means consist of a single switching matrix adapted to couple any of the p1+q1+r1 input ports to any of the p2+q2+r2 output ports. This single-matrix architecture can switch all the granularities at the same time, which facilitates reconfiguration as a function of evolution of the traffic to be switched.